

Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

# Pham 216872 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216872 has 7 members, 2 are drafts.

Phages represented in each track:

Track 1 : AdaS\_33Track 2 : Peebs\_219Track 3 : Malisha 29

Track 4 : Piper2020\_23, DocMcStuffins\_23

Track 5 : REQ3\_23Track 6 : Cantare\_76

## Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 9, it was called in 2 of the 5 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

DocMcStuffins\_23, Piper2020\_23,

Genes that have the "Most Annotated" start but do not call it:

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Genes that do not have the "Most Annotated" start:

AdaS\_33, Cantare\_76, Malisha\_29, Peebs\_219, REQ3\_23,

## Summary by start number:

### Start 9:

- Found in 2 of 7 (28.6%) of genes in pham
- Manual Annotations of this start: 2 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DocMcStuffins\_23 (F1), Piper2020\_23 (F1),

### Start 11:

- Found in 1 of 7 (14.3%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 100.0% of time when present

Phage (with cluster) where this start called: Malisha\_29 (DN),

#### Start 13:

- Found in 1 of 7 (14.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: REQ3\_23 (singleton),

## Start 15:

- Found in 1 of 7 (14.3%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cantare\_76 (singleton),

### Start 19:

- Found in 1 of 7 (14.3%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Peebs\_219 (BE1),

### Start 22:

- Found in 1 of 7 (14.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AdaS\_33 (AY),

## **Summary by clusters:**

There are 5 clusters represented in this pham: DN, F1, singleton, BE1, AY,

Info for manual annotations of cluster BE1:

•Start number 19 was manually annotated 1 time for cluster BE1.

Info for manual annotations of cluster DN:

•Start number 11 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster F1:

•Start number 9 was manually annotated 2 times for cluster F1.

## Gene Information:

Gene: AdaS\_33 Start: 23341, Stop: 23913, Start Num: 22

Candidate Starts for AdaS\_33:

(10, 23191), (22, 23341), (37, 23467), (39, 23563), (45, 23626), (47, 23656), (48, 23665), (50, 23677), (60, 23788),

Gene: Cantare 76 Start: 62423, Stop: 63022, Start Num: 15

Candidate Starts for Cantare 76:

(Start: 15 @62423 has 1 MA's), (18, 62441), (33, 62582), (49, 62819), (63, 62963), (64, 62978),

Gene: DocMcStuffins\_23 Start: 23233, Stop: 23961, Start Num: 9

Candidate Starts for DocMcStuffins\_23:

(Start: 9 @23233 has 2 MA's), (14, 23332), (17, 23353), (40, 23656), (53, 23767), (65, 23905),

Gene: Malisha\_29 Start: 23381, Stop: 24040, Start Num: 11

Candidate Starts for Malisha 29:

(1, 23009), (2, 23066), (3, 23111), (4, 23165), (5, 23168), (6, 23204), (7, 23249), (8, 23252), (Start: 11 @23381 has 1 MA's), (12, 23390), (16, 23417), (18, 23432), (20, 23480), (24, 23507), (25, 23516), (29, 23555), (41, 23750), (42, 23762), (45, 23795), (46, 23804), (51, 23849), (55, 23885), (59, 23954), (62, 23981),

Gene: Peebs\_219 Start: 112985, Stop: 113584, Start Num: 19

Candidate Starts for Peebs\_219:

(16, 112949), (Start: 19 @112985 has 1 MA's), (26, 113057), (27, 113063), (28, 113072), (31, 113102), (32, 113108), (34, 113111), (35, 113117), (36, 113144), (38, 113240), (42, 113291), (52, 113384), (57, 113456), (61, 113510), (66, 113543),

Gene: Piper2020\_23 Start: 23232, Stop: 23960, Start Num: 9

Candidate Starts for Piper2020 23:

(Start: 9 @23232 has 2 MA's), (14, 23331), (17, 23352), (40, 23655), (53, 23766), (65, 23904),

Gene: REQ3\_23 Start: 10266, Stop: 11021, Start Num: 13

Candidate Starts for REQ3 23:

 $(13,\,10266),\,(21,\,10365),\,(23,\,10380),\,(30,\,10443),\,(43,\,10668),\,(44,\,10671),\,(46,\,10683),\,(51,\,10728),\\$ 

(54, 10746), (56, 10791), (58, 10836), (67, 10932), (68, 10974), (69, 10995), (70, 11001),